ISSUANCE TRANSMITTAL SHEET

N A S A National Aeronautics and Space Administration

George C. Marshall Space Flight Center Marshall Space Flight Center, Alabama 35812

Issuance Number: MMI 2410.14 Date: May 10, 1993

Material Transmitted:

- 1. Marshall Management Instruction, MMI 2410.14, subject: "MSFC Software Management, Assurance, and Engineering Policy"
- 2. In compliance with NMI 2410.10, this Instruction implements Marshall Space Flight Center (MSFC) policy for software management, assurance, and engineering requirements.

Filing Instructions:

File in a standard 3-ring binder in numerical sequence without regard to the alphabetic prefix which identifies the type of issuance.

MSFC-Form 1376 (Rev. July 1979)

N A S A National Aeronautics and Space Administration

George C. Marshall Space Flight Center Marshall Space Flight Center, Alabama 35812

| Originating Organization: Effective Date: MMI: CR01 May 10, 1993 2410.14

Subject: MSFC Software Management, Assurance, and Engineering Policy

1. PURPOSE

To establish policy and responsibilities at the Marshall Space Flight Center (MSFC) for implementing software management, assurance, and engineering requirements.

2. <u>APPLICABILITY</u>

This instruction is applicable to all MSFC organizational elements and applies to all MSFC software.

- 3. <u>REFERENCES</u> (Only applicable parts of the most recent edition apply.)
 - a. MMI 2410.11, "MSFC Software Management Requirements for Flight Projects"
 - b. MMI 2410.12, "MSFC Software Assurance Requirements for Flight Projects"
 - c. MM 2410.13, "MSFC General-Purpose Software Development and Management Requirements Manual"
 - d. MM 8075.1, "MSFC Software Management and Development Requirements Manual"
 - e. CQ 5330.1, "Software Quality Assurance Requirements for MSFC Projects"
 - f. NMI 8070.2, "NASA Participation in the Development and Use of Voluntary Standards"
 - g. NASA-STD-2100-91, "NASA Software Documentation Standard Software Engineering Program"
 - 4. AUTHORITY (Only applicable parts of the most recent edition apply.)

NMI 2410.10, "NASA Software Management, Assurance, and Engineering Policy"

5. POLICY

It is MSFC policy that each software acquisition or development activity shall use sound management, engineering, and assurance practices and standards.

- a. MSFC Software Management, Engineering, and Assurance shall comply with NASA policy.
- b. Software acquisition and development shall be in accordance with NASA acceptable standards.
- c. The software in each acquisition or development activity shall be identified as one of three basic types:
 - (1) User purchased or developed for organizational application requires only proper administrative management oversight;
 - (2) Project sponsored software developed for a general purpose computer system see MM 2410.13; or
 - (3) Software for embedded systems including flight, ground checkout, support, and simulation see MM 8075.1.

6. RESPONSIBILITIES

MSFC officials-in-charge of project and functional offices are responsible for:

- a. Ensuring that each software acquisition or development activity is conducted in accordance with NASA/MSFC policy and accepted standards;
- b. Classifying software identified for general purpose computer systems or embedded systems according to methods described in their respective Marshall manuals;
- c. Establishing the software project management and development requirements tailored to meet project needs;
 - d. Allocating sufficient resources and schedules to implement identified requirements; and
- e. Imposing project tailored software management, engineering, and assurance requirements on MSFC contracts.

Orig s/by

T. J. Lee Director

Distribution:

SDL-2